ABSTRACT

A file of digital color data representing a color image is transformed into a new file of digital color data where one or more colors have been transformed to one or more new color locations where their reproduction is known to be preferred. The digital color data is provided in a multi-dimensional color space where the color locations to be operated on in the color space are designated as color magnets. The color space distance is then calculated between the color locations of the digital color data in the color space and the color magnets. A particular activity is prescribed for each color magnet that affects nearby color locations in the color space; this activity includes one or more activity selected from the group including attraction, repulsion, shielding and dragging. Then, the digital color data is mapped to new locations in the multi-dimensional color space as a function of the color space distance and the selected activity, wherein the degree or strength of activity is a function of the color space distance or direction in color space.